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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/777,752	02/13/2004	Tsung-Yu Yu Kao	4444-0137P	5320
2292	7590	09/25/2006	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			SCHATZ, CHRISTOPHER	
			ART UNIT	PAPER NUMBER

1733

DATE MAILED: 09/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/777,752

Applicant(s)

YU KAO ET AL.

Examiner

Christopher T. Schatz

Art Unit

1733

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) 2,5 and 11-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,4 and 6-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 May 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election with traverse of Group I, Species A2 and Species B1 in the reply filed on July 20, 2006 is acknowledged. The traversal is on the ground(s) that there is no undue burden to the examiner to consider all the claims in a single application. This is not found persuasive because Group I and Group II fall in different classifications and consideration of both Groups in a single application would require the examiner to search both classification areas. The species listed are mutually exclusive and considering all the species in a single application would require the examiner to search each of the mutually exclusive methods. Claims 6 and 11-19 are withdrawn by the examiner as being drawn to a non-elected invention.

The requirement is still deemed proper and is therefore made FINAL.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 3, 4, and 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gyoda (2002/0063842) in view of Niiya (2003/0137630).

Gyoda discloses a method for manufacturing a liquid crystal panel, comprising: providing a first glass substrate 12; forming a black matrix 16b (figure 1, paragraph 0084) on a first surface of said first glass substrate, wherein said black matrix includes a plurality of openings; forming a sealant on the peripheral region of a first surface of the first glass substrate; dropping an amount of liquid crystal on said first surface of said first glass substrate surrounded by said sealant; assembling said first glass substrate and a second glass substrate 12 by said sealant, wherein said first surface of said first glass substrate faces said first surface of said second glass substrate; and curing said sealant by UV light irradiation from a side of said second glass substrate (paragraphs 0092-0099, 0105, 0113, figures 4-10). The reference differs from applicant's claimed method in that Gyoda discloses application of the sealant and liquid crystal material on the substrate with the black matrix and the color filters. However, examiner asserts that one of ordinary skill in the art would have readily understood that the sealant layer and the liquid crystal material could alternatively been applied to the second substrate 12 as is well known in the art. For example, Niiya teaches that the sealant layer can be applied to the substrate 1a comprising the black matrix and color filters, or said sealant can alternatively be applied to the opposing layer (paragraph 0150). At the time of the invention it would have been obvious to a person of ordinary skill in the art to apply the sealant layer and the liquid crystal material to the second substrate of Gyoda as an alternative to applying said sealant layer and liquid crystal material to the first substrate as such methods are considered equivalent alternatives as taught by Niiya above. Applicant should note that the phrase "for forming a thin film transistor thereon" is intended use language and *does not* further limit the claim. Claim 1 as written, *does not require* a TFT to be formed on the first surface of the first substrate.

As to claim 3, Gyoda discloses a method further comprising forming a plurality of color filters on said first surface of said first glass substrate, wherein said color filters are formed in said openings of said black matrix respectively (figure 1, paragraph 0084). As to claim 8, Gyoda discloses a method wherein the direction of said light radiation is perpendicular to said first surface of said second glass substrate (figures 9, 10). As to claim 9, Gyoda discloses a method further comprising wherein the material of said black matrix is selected from the group consisting of chromium, chromium oxide and an opaque resin. As to claim 10, Niiya discloses a method further comprising forming another sealant on the peripheral region of said first surface of said first glass substrate, wherein said sealant and said another sealant face each other (paragraph 0150).

4. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gyoda and Niiya as applied above, and in further view of Park et al. '365.

Gyoda and Niiya disclose a method as stated above, but the references are silent as to the use of an acrylic resin as a sealing material. Park et al. is directed to a method of manufacturing a LCD device and discloses that acrylic and epoxy-acrylic synthetic compounds are well known sealing materials in the art (column 4, lines 9-19). At the time of the invention it would have been obvious to a person of ordinary skill in the art to modify Gyoda's method by using an acrylic resin or epoxy-acrylic synthetic resin as the sealing agent as is well known in the art and taught by Park et al.

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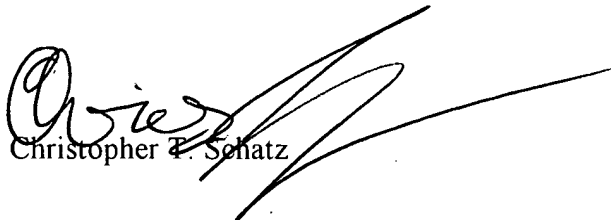
*Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Lu et al. '378, relevant to formation of a black matrix and color filters on a TFT substrate.

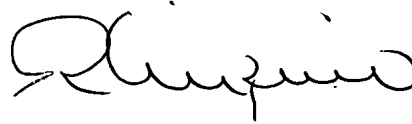
Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Christopher T. Schatz** whose telephone number is **571-272-1456**. The examiner can normally be reached on 8:00-5:30, Monday -Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Christopher T. Schatz



RICHARD CRISPINO  
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